No.



9400019

TO ALL TO WHOM THESE; PRESENTS SHALL COME; The University of Georgin Research Joundation, Inc.

Thereas, there has been presented to the

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED, PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A part hereof, and the various requirements of LAW in such cases made and provided have BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE of plant variety protection under the LAW.

NOW, therefore, this certificate of plant variety protection is to grant unto the said applicant(s) and the successors, heirs or assigns of the said applicant(s) for the term of WENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND RIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED ${f AW}$, the right to exclude others from selling the variety, or offering it for sale, or ODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR ING IT FOR ANY OF THE ABOVE PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. IN [ED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS A CLASS OF ID AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS SPECIFIED BY THE OWNER OF TAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'Haskell'

In Testimony Museof, I have hereunto set my hand and caused the seal of the Hant Amirin Frontection Office to be affixed at the City of Washington, D.C. this thirty-first day of October in the year of our Lord one

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Office, ORM, Room 404-W, Washington, D.C. 20250; and to the Office of Management and Budget, Paperwork Reduction Project (OMB #0581-0055), Washington, 20250.

Comments of the Comments of the Comments of Comm

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE Application is required in order to determine it a plant variety protection certificate is to be issued (? U.S.C. 2421). APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE Information is held confidential until certificate is issued (7 U.S.C. 2426). (Instructions on reverse) 1. NAME OF APPLICANT(S) (as it is to appear on the Certificate) TEMPORARY DESIGNATION OR EXPERIMENTAL NO. 3. VARIETY NAME The University of Georgia Research Foundation, Inc. G84-3185 HASKELL 4. ADDRESS (street and no. or R.F.D. no., city, state, and ZIP) PHONE (Include area code) FOR OFFICIAL USE ONLY PVPO NUMBER Boyd Graduate Studies Research Center (706) 542-6512 University of Georgia Athens, GA 30602-7411 6. GENUS AND SPECIES NAME 7. FAMILY NAME (Botanical) N Glycine max /0:30 🛛 AM. 🔲 P.M Leguminosae 8. CROP IGNO NAME (Common Hame) 9 DATE OF DETERMINATION Soybean 1984 18. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION (Corporation, partnership, association, etc.) Æ Certificate Fee: Corporation 11. IF INCORPORATED, GIVE STATE OF INCORPORATION 12. DATE OF INCORPORATION Georgia 17 Nov 1978 13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS Dr. Janice A. Kimpel Vice-President Office for Research Boyd Graduate Studies Research Center University of Georgia Athens, GA 30602-7411 (706) 542-5929 PHONE finclude area code! 14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow INSTRUCTIONS on Inversal a. X Exhibit A. Origin and Breeding History of the Variety b. X Exhibit B, Novelty Statement. Exhibit C, Objective Description of Variety. a. X Exhibit D. Additional Description of Variety. Exhibit E. Statement of the Basis of Applicant's Ownership. \mathbf{x} Seed Sample (2,500 viable untreated seeds). Date Seed Sample mailed to Plant Variety Protection Office 10/26/93g. X Filing and Examination Fee. (2,325) made payable to "Treasurer of the United States." 15. DOES THE APPLICANTIS) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? (See section 83(a) of the Plant Variety Protection Act.)

Protection Act.)

VES. (8 - YES, answer dems 16 and 17 below)

NO. (8 - NO. * skip to item 18 below) 16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE UNATED AS TO NUMBER OF GENERATIONS? TEST TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? X CERTIFIED FOUNDATION REGISTERED 18. DID THE APPLICANT(S) PREVIOUSLY FILE FOR PROTECTION OF THE VARIETY IN THE U.S.? YES (# "YES," Ithrough Plant Variety Protection Act Patent Act Give date ____ 19 HAS THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES? YES (II "YES," give names of countries and dates) X NO 20. The applicant(s) declare(s) that a viable sample of basic seeds of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable. The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct. uniform, and stable as required in section 41, and is entitled to protection under the provisions of section 42 of the Plant Variety Protection Act. Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties. SIGNATURE OF APPLICANT (Owner(s)) CAPACITY OR TITLE 10-22-93

Executive Vice President

CAPACITY OR TITLE

Joe L. Key

SIGNATURE OF APPLICANT IO

EXHIBIT A UNIVERSITY OF GEORGIA RESEARCH FOUNDATION APPLICATION FOR HASKELL ORIGIN AND BREEDING HISTORY

1981	Cross of 'Johnston' x 'Braxton' made in Athens, GA
1981-82	F ₁ grown during the winter at Isabela, Puerto Rico
1982	F ₂ was grown in Athens, GA
1982-83	F ₃ and F ₄ generations were advanced in the winter at Isabela, Puerto Rico
1983	F ₅ was grown in Athens, GA
1983-84	$F_{5:6}$ lines were screened for resistance to southern and peanut root-knot nematodes in the greenhouse during the winter
1984	F _{5:6} plant rows were grown in Athens, GA. Plant row #84-3185 was selected and composited after it was determined to be stable and true breeding for major characteristics.
1985	Tested as G84-3185 in Athens, GA in 2 reps
1986	Tested at Athens and Plains, GA in 2 reps/ location
1987	Tested at Athens, Plains, and Griffin, GA in 3 reps/location
1988	Entered in USDA Uniform Preliminary Test VII grown at 9 locations (2 reps/location).
1989	Evaluated in USDA Uniform Regional Test VII at 24 locations (3 reps/location).
1990	Evaluated in USDA Uniform Regional Test VII at 21 locations (3 reps/location). Grown at 9 locations (3 reps/location) in the Georgia Variety Trials.
1991	Evaluated in USDA Uniform Regional Test VII at 23 locations (3 reps/location). Grown at 12 locations (3 reps/location) in the Georgia Variety Trials.
1992	Evaluated in USDA Uniform Regional Test VII at 23 locations (3 reps/location). Evaluated at 11 locations (3 reps/location) in the Georgia Variety Trials.
1993	Released as Haskell

EXHIBIT B UNIVERSITY OF GEORGIA RESEARCH FOUNDATION APPLICATION FOR HASKELL NOVELTY STATEMENT

To our knowledge Haskell most nearly resembles Thomas, Hagood, Stonewall, and Colquitt. Differences include but are not limited to the following:

- 1. Peanut root-knot nematode Haskell differs from Thomas, Stonewall, and Hagood in that it is resistant to peanut root-knot nematode whereas Thomas, Stonewall, and Hagood are susceptible.
- 2. Race 3 of soybean cyst nematode Haskell is susceptible to race 3 of soybean cyst nematode whereas Thomas, Stonewall, and Hagood are resistant.
- 3. Flower color Haskell has purple flowers whereas Hagood and Stonewall have white flowers.
- 4. Pubescence color Haskell has tawny pubescence whereas Hagood has gray pubescence.
- 5. Hilum color Haskell has black hilum whereas Hagood has buff hilum.
- 6. Plant lodging Haskell is moderately susceptible to lodging whereas Colquitt, Thomas, and Stonewall are resistant.

	Lodging rating+						
Haskell	1.9	2,1	2,3	3,1	1.6	2.6	2.6
Thomas	1.5	1.2	1.4	1.5	1.1	1.7	1.1
Stonewall	1.5	1.6	1.4	2.3	1.1	2.0	1.5
Colquitt	1.5	1,4	1.6	2.6	1.1	2.0	1.6
No. of tests	3	3	3	3	3	3	2
No. of reps/test	3	3	3	3	3	3	3
LSD (0.05)	0.50	0.32	0.49	0.37	0.46	0.32	0.54

⁺ Rating: 1 (all plants erect) to 5 (over 80% of plants prostrate).



July 14, 1995

Dr. Jeffrey L. Strachan USDA/AMS National Agricultural Library Bldg. Rm. 500, 10301 Baltimore Blvd. Beltsville, MD 20705

Dear Dr. Strachan:

I have calculated the Fisher Least Significant Difference as a measure of the precision of the lodging data from Exhibit B of the Plant Variety Certificate Application No. 9400019 (Title: Haskell Soybean). Note that in 6 of the 7 comparisons Haskell has significantly more lodging than Colquitt. Each of these comparisons (columns of data) consist of three years of data from one location except the last column which consists of data from only two years).

I compared the maturity and plant height of Haskell and Colquitt at 8 locations for 3 years. In these 24 location-year environments, Haskell averaged 1 day later than Colquitt and three inches shorter.

I have enclosed a copy of the modified Exhibit B (includes the LSDs). If you need additional information or clarification, please contact me.

Sincerely,

N. Roger Boerma

H. Roger Boerma Research Professor & Coordinator Center for Soybean Improvement

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE

PLANT VARIETY PROTECTION OFFICE BELTSVILLE, MARYLAND 20705

EXHIBIT C

OBJECTIVE DESCRIPTION OF VARIETY SOYBEAN (Glycine max L.)

NAME OF APPLICANT(S)	TEMPORARY DESIGNATION	VARIETY NAME
The University of Georgia Research Foundation, Inc.	C84-3185	HASKELL.
ADDRESS (Street and No., or R.F.D. No., City, State, and Zip Code	904-3183	
Boyd Graduate Studies Research Center	•	FOR OFFICIAL USE ONLY
University of Georgia		PVPO NUMBER
Athens, GA 30602-7411		9400019
Choose the appropriate response which characterizes the vari in your answer is fewer than the number of boxes provided, a Started characters ** are considered fundamental to an ad-	lety in the features described l	clow. When the number of significant digit
Starred characters * are considered fundamental to an adeque when information is available.	piace a zero in the first box wi	ich number is 9 or less (e.g., 0 9).
when information is available.	ate soybean variety descriptio	n. Other characters should be described
1. SEED SHAPE:		
1 = Spherical (L/W, L/T, and T/W ratios = < 1.2) 3 = Blongate (L/T ratio > 1.2; T/W = < 1.2)	2 = Spherical Flattened (L 4 = Elongate Flattened (L	M ratio > 1.2; L/T ratio = < 1.2) /T ratio > 1.2; T/W > 1.2)
* 2. SEED COAT COLOR: (Mature Seed)		
1 1 - Yellow 2 - Green 3 - Brown	4 = Black , 5 = Other (5)	pecify)
2 5550 004741		
2. SEED COAT-LUSTER: (Mature Hand Shelled Soed)		
2 1 = Dutil ("Corsoy 79"; "Braxton") 2 = Shiny ("Nebsoy")	; 'Gesoy 17']	
* 4. SEED SIZE: (Mature Seed)		
1 6 Grams per 100 seeds		
5. HILUM COLOR: (Mature Seed)		
I = Buff 2 = Vallania	Gray 5 = Imperfect Black	6 = Black 7 = Other (Specify)
K 6. COTYLEDON COLOR: (Mature Seed)	· · · · · · · · · · · · · · · · · · ·	
1 = Yellow 2 = Green		
7. SEED PROTEIN PEROXIDASE ACTIVITY:	· · · · · · · · · · · · · · · · · · ·	
1 - Low 2 - High		
8. SEED PROTEIN ELECTROPHORETIC BAND:		e de la companya del companya de la companya del companya de la co
<u></u>		4
1 = Type A (SP1 ^a) 2 = Type B (SP1 ^b)		
9. HYPOCOTYL COLOR:		
1 = Green only ("Evans"; "Davis") 2 = Green with bro 3 = Light Purple below cotyledons ("Beeson"; "Pickett 71") 4 = Dark Purple extending to unifoliate leaves ("Hodgson"; "Cok	onze band below cotyledons ('Woo ser Hampton 266A')	dworth'; 'Tracy')
10. LEAFLET SHAPE:		
3 1 = Lanceolate 2 = Oval 3 = Ovate	4 = Other (Specify)	5

Portion States Come No. (1245-5)	9400019
11. LEAFLET SIZE:	
1 = Small ('Amsoy 71'; 'A5312') 3 = Large ('Crawford'; 'Tracy')	2 = Medium ('Corsoy 79'; 'Gasoy 17')
12. LEAF COLOR:	
1 = Light Green (Webser, Wester)	
2 3 - Dark Green ('Gnome'; 'Tracy')	2 = Medium Green ('Corsoy 79'; 'Brakton')
* 13. FLOWER COLOR-	
[a]	
2.31.23	3 = White with purple throat
X 14. POD COLOR:	
1 = Tan 2 = Brown	3 ~ Black
* 15. PLANT PUBESCENCE COLOR:	
2 1 - Gray 2 = Brown (Tawn	w).
16. PLANT TYPES:	
TI. LEAFLET SIZE: 2	
2 1- Small (*Ameor 71; 'AS3171 2 - Medium (*Corroy 78'; Gracy 17') 12 LEAF COLOR: 2 1- Light (*Cowried; 'Tracy') 12 LEAF COLOR: 2 1- Sind (freen (*Wester; 'You') 2 1- Medium Green (*Corsoy 78'; Gration') ** 13. FLOWER COLOR: 2 1- White 2 - Purple 3 - White with purple throat ** 14. FOD COLOR: 2 1- Tan 2 - Brown 3 - Black ** 15. FLANT FUBESCENCE COLOR: 2 1- Gray 2 - Brown (Tawry) 16. FLANT TYPES: 2 1 - Sender (*Essat; 'Amusy 21') 3 - Bodyn (*Gonomi; 'Green) 1 1 - Deserminate (*Gonomi; 'Brasson') 3 - Bodyn (*Gonomi; 'Green) 1 1 - Deserminate (*Gonomi; 'Brasson') 3 - Bodyn (*Gonomi; 'Green) 1 1 - Deserminate (*Gonomi; 'Brasson') 3 - Bodyn (*Gonomi; 'Brasson') 3 - Bodyn (*Gonomi; 'Green) 1 1 - Deserminate (*Gonomi; 'Brasson') 3 - Bodyn (*Gonomi; 'Brasson') 4 12 - Seni-Determinate (*Will') 4 13. FLANT HABIT: 1 1 - Deserminate (*Gonomi; 'Brasson') 3 - Bodyn (*Gonomi; 'Brasson') 3 - Bodyn (*Gonomis Gonomi; Brasson') 3 - Bodyn (*Gonomis Gonomis Gration) 4 14 - Sonomi (*Gonomis Gonomis Gration) 5 - Seni-Determinate (*Will') 5 - Fundamonas ghydines 4 2 Bacterial Funule (*Bothomonas ghydines) 5 - Bodyn (*Gonomis Gonomis ghydines) 5 - Gonomis (*Gonomis Gonomis ghydines) 6 - Gonomis (*Gonomis Gonomis ghydines) 7 - Gonomis (*Gonomis Gonomis ghydines) 8 - Gonomis (*Gonomis Gonomis ghydines) 9 - Gonomis (*Gonomis Gonomis ghydines) 1 - Gonomis (*Gonomis Gonomis ghydines) 1 - Gonomis (*Gonomis Gonomis ghydines) 1 - Gonomis (*Gonomis Gonomis ghydines) 2 - Gonomis (*Gonomis Gonomis ghydines) 3 - Gonomis (*Gonomis Gonomis Gonomis ghydines) 4 - Gonomis (*Gonomis Gonomis Gonom	
2 1 - Small (Amooy 71'; AS312') 3 - Legal (Converted; 'Yeary') 12. LEAF COLOR: 2 1 - Legal (Green (Weber; 'Yeary') 2 - Medium Green ('Corroy 79'; 'Braston') 12. LEAF COLOR: 2 1 - White 2 - Purple 5 - White with purple throat 14. FOO COLOR: 2 1 - White 2 - Purple 5 - White with purple throat 15. FLANT PUBESCENCE COLOR: 2 1 - Small (Amooy 71'; Associated of the color) 16. FLANT TYPES: 2 1 - Small (Amooy 71') 2 - Intermediate (Amooy 'Braxton') 17. FLANT HABIT: 1 1 - Determinate (Tonome'; 'Braxton') 2 - Small Determinate (TWIT) 3 - Independiate (Notion'; 'Braxton') 2 - Small Determinate (TWIT) 1 1 - Observationate (Notion'; 'Braxton') 2 - Small Determinate (TWIT) 1 1 - Observationate (Notion'; 'Braxton') 2 - Small Determinate (TWIT) 1 1 - Observationate (Notion'; 'Braxton') 2 - Small Determinate (TWIT) 1 1 - Observationate (Notion'; 'Braxton') 2 - Small Determinate (TWIT) 1 1 - Observationate (Notion'; 'Braxton') 2 - Small Determinate (TWIT) 1 1 - Observationate (Notion'; 'Braxton') 2 - Small Determinate (TWIT) 2 Small (Notion'; 'Braxton') 2 - Small (Notion') 3 - Notion'; 'Braxton') 3 - Notice (Notice (Notion') 3 - Notice (Notice	
1 = Determinate ('Gnome': 'Braxton') 3 = Indeterminate ('Nebsoy': 'Improve	. 2 = Semi-Determinate (Will') d Pelican')
18. MATURITY GROUP:	
11 0 0 3 0	5-11 6=III 7=IV 0=1/
	*III 12=IX 13=X
	= Susceptible; 2 = Resistant)
Bacterial Pustule (Xanthomonas phaseol	i var. sojensis)
* 0 Bacterial Blight (Pseudomonas glycinea)	
★ 0 Wildfire (Pseudomonas tabaci)	
FUNGAL DISEASES:	
Brown Spot (Septoria glycines)	
Frogeye Leaf Spot (Cercospora sojina)	
* [] Bart [] []	Race 3 0 Bace 4 0 Days 2
	Hace 5 Z Other (Specify)
· /	-
# · -1	and the state of the
	m) — The state of

Stem Canker (Diaporthe phaseolorum var. caulivora)

19. O SEASE REACTIO	N: (Ester 6 = Not Tested; 1 = Susceptible; 2 =	Resistant (Continued)	
FUNGAL DISEAS		•	
* 0 Pod and Su	tm Blight (Disporthe phaseolorum var. sojae)		
0 Purple Seed	Swin (Cercospora kikuchii)		
0 Rhizoctonia	Root Rot (Rhizoctonia solani)	ing the state of	er tigger og skalende er
Phytophtho	ora Rot (Phytophthora megasperma var. sojae)		
★ ① Race 1	0 Race 2 0 Race 3 0	Race 4 0 Race 5	0 Race 6 0 Race 7
0 Race 8	0 Ruce 9 Other (Specify)	<u> </u>	
VIRAL DISEASES			
0 Bud Blight	Tobacco Ringspot Virus)	en de la servició de la companya de La companya de la co	
O Yellow Mos	sic (Bean Yellow Mossic Virus)	Company of the Albert	And the second of the second
* 0 Compes Mos	zic (Compes Chlorotic Virus)	Property (Astronomy)	
0 Pod Mottle	Bean Pod Mottle Virus		
* 0 Seed Mottle	(Soybean Mossic Virus)		
NEMATODE DISE	ASES:		
Soybean Cyr	it Nematode (Heterodera glycines)		
★ 0 Race 1	0 Race 2 1 Race 3 0	Race 4 1 Other 6	Specifyl Race 14, Race 9
0 Lance Nema	tode (Hapicisimus Colombus)		
* 2 Southern Ro	ot Knot Nematode (Meloidogyne incognital		
★ 0 Northern Ro	ot Knot Nematode (Meloidogyne Hapla)	* .	
2 Peanut Root	Knot Nematode (Meloidogyne arenaria)		
0 Fleniform Ne	matode (Retylenchulus reniformis)		
0 OTHER DIS	EASE NOT ON FORM (Specify):		
+ []	SPONSES: (Enter 0 = Not Tested; 1 = Suscept	žbie; 2 = Resistanti	
	s on Celcareous Soil		
	n		
	(Enter 0 = Not Tested; 1 = Susceptible; 2 = Re	sistanti	
	Beede (Epilachna varivestis)		
	opper (Empossos fabae)		
	1		
22. INDICATE WHICH VA	RIETY MOST CLOSELY RESEMBLES THAT	SUBMITTED.	
CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant Shape	Colquitt	Seed Coat Luster	Colquitt
Leaf Shape	Colquitt	Seed Size	Stonewall
Leaf Size	Stonewall Stonewall	Seed Shape	Thomas
	DEOTTEMBETT	Seedling Pigmentation	Colquitt

21. GIVE DATA FOR EUDMITTED AND SIMILAR STANDARD VARIETY: Paired Comparison Date

VARIETY	MO. OF DAY'S	PLANT LOOGING SCORE	CM FLANT HEIGHT	LEAFLET SIZE		SEED CONTENT		SEED SIZE G/100	NO.
	MATURITY			CH WIND .	Che Congre	% Protein	× 0:1	SEEDS	\$EE0\$/ PO0
Haskell Submitted	154	2.4	91		. 12 0.00 2 	39.6	20.9	15.7	
Stonewall Name of Similar Variety	154	2.3	89			41.4	20.7	16.2	

Publications useful as reference aids for completing this form:

- 1. Caldwell, B.E., ed. 1973. Soybeans: Improvement, Production, and Uses. Amer. Soc. Agron. Monograph No. 16.
- 2. Buttery, B.R. and R.J. Buzzell, 1968. Peroxidese activity in seeds of soybean varieties. Crop Sci., 8: 722-725.
- 3. Hymowitz, T. 1973. Electrophoretic analysis of SBTI-Az in the USDA soybean gomplism collection. Crop Sci., 13: 420-421.
- 4. Payne, R.C. and L.F. Morris. 1976. Differentiation of soybean cultivars by seeding pigmentation patterns. J. Seed Technol. 1: 1-19.

87 OCT 2 9 1993

EXHIBIT D UNIV. OF GEORGIA RESEARCH FOUNDATION APPLICATION FOR HASKELL ADDITIONAL DESCRIPTION OF VARIETY

The Georgia Agricultural Experiment Stations announce the release of a new high yielding, multiple-pest resistant variety named HASKELL. This Maturity Group VII variety was selected to combine superior yield with resistance to southern, peanut, and javanese root-knot nematodes.

HASKELL was derived from an F_5 plant from the cross Johnston x Braxton. The generations were advanced to the F_5 by the pod bulk method in Georgia and Puerto Rico. From 1985 to 1987, HASKELL was tested as G84-3185 for nematode and disease resistances, agronomic performance, and seed yield in Georgia. G84-3185 was advanced to Regional Preliminary Group VII in 1988. From 1988 to 1992, it was evaluated in Georgia and Regional Test VII. Its mean performance in 77 environments in the southeastern USA is shown below:

Variety	Seed yield	Maturity	Lodging	Plant height	Seed quality	Seeds/ pound	Seed Oil P	1 [§] rotein
	bu/A	date	rating†	inches	rating‡	no.	%	%
HASKELL	44.1	10-20	2.4	35	1.8	2,929	20.9	39.6
Hagood	40.7	10-22	2.2	39	1.7	3,266	19.9	42.4
Stonewall	41.6	10-19	1.8	34	1.8	2,873	20.7	41.4

[†] Rating: 1 (plants erect) to 5 (plants prostrate).

HASKELL averaged 6 and 8% higher in yield than Stonewall and Hagood, respectively. It matures 1 d later than Stonewall and 2 d earlier than Hagood. HASKELL is similar in lodging resistance to Hagood. Plant height is similar to Stonewall and averages 4 inches shorter than Hagood. Seed quality and seed size of HASKELL are similar to Stonewall. HASKELL has a higher oil content and lower protein content than Hagood.

HASKELL has a determinate growth habit, purple flowers, tawny pubescence, and tan pod walls. Seeds are yellow with shiny seed coats and black hila. It is resistant to southern, peanut, and javanese root-knot nematodes. It has moderate resistance to stem canker.

Breeder seed of HASKELL was provided to the Georgia Seed Development Commission in 1992. Small quantities of seed for research purposes can be obtained from H. Roger Boerma, Department of Crop & Soil Sciences, University of Georgia, Athens, GA 30602-7272.

[‡] Rating: 1 (very good) to 5 (very poor).

[§] Dry-weight basis.

EXHIBIT E THE UNIVERSITY OF GEORGIA RESEARCH FOUNDATION STATEMENT OF APPLICANT'S OWNERSHIP

The variety for which plant variety protection is hereby sought was developed by H. Roger Boerma, E. Dale Wood, Richard S. Hussey, and Daniel V. Phillips, employees at the University of Georgia Agricultural Experiment Station. The Georgia Agricultural Experiment Station is a part of The University of Georgia. The University of Georgia is one of the universities of the University System of Georgia. The Board of Regents of the University System of Georgia ("Board of Regents") is a body that was created by the Constitution of the State of Georgia and is charged with the responsibility of operating the Universities in The University System of Georgia. The University of Georgia Research Foundation, Inc. is a Georgia nonprofit corporation which was incorporated to, among other things, own and exploit intellectual property developed or created at The University of Georgia. On June 9, 1982 the Board of Regents approved a Patent Policy regarding inventions and discoveries by persons employed at The University of Georgia. As an employee at the Georgia Agricultural Experiment Station, H. Roger Boerma, E. Dale Wood, Richard S. Hussey, and Daniel V. Phillips are subject to said Patent Policy. Rights in novel plant varieties developed at The University of Georgia, including Haskell, are covered by said Patent Policy. By agreement, the Board of Regents assigned to the University of Georgia Research Foundation, Inc. all rights in intellectual property covered by said Patent Policy. This agreement applies to then existing intellectual property and to intellectual property which was developed thereafter.